CLAIMS

1.   A method of modelling a state machine, comprising detecting if, from a state, an event gives rise to non-determinism and, if it does, generating a world for at least some of the permutations, and processing the event in each of the worlds.

2.   A method as claimed in claim 1, comprising, following processing of the event, identifying identical worlds and disregarding all except one of the identical worlds.

3.   A method as claimed in either preceding claim, further comprising processing a further event in all of the extant worlds.

4.   A method as claimed in any preceding claim, in which the generating step comprises permuting or taking a selection of permutations of set-actions.

5.   A method as claimed in any preceding claim, in which the generating step comprises permuting or taking a selection of permutations of set-meta-events.

6.   A method as claimed in any preceding claim, comprising receiving a request for information on the state model from an external program, and responding to the request with the requested information.

7.   A method as claimed in any preceding claim, comprising receiving an instruction to process an event, and processing the event in response thereto.

8.   A method as claimed in any preceding claim, comprising receiving an instruction to eliminate a world for each of one or more non-

deterministic branches, and in response thereto eliminating the specified world or worlds.

9.   A method as claimed in any preceding claim, comprising receiving an instruction to refrain from generating a world for one or more non-deterministic branches, and in response thereto refraining from generating the specified branch or branches.

10.   A computer program containing instructions for a computer to carry out the method of any of claims 1 to 9.

11.   A computer programmed with the computer program of claim 10.

12.   Apparatus for modelling a state machine, the apparatus comprising means for detecting if, from a state, an event gives rise to non-determinism and, means responsive to a positive determination for generating a world for at least some of the permutations, and means for processing the event in each of the worlds.

13.   Apparatus as claimed in claim 12, comprising means arranged following processing of the event for identifying identical worlds and for disregarding all except one of the identical worlds.

14.   Apparatus as claimed in claim 12 or claim 13, comprising means for processing a further event in all of the extant worlds.

15.   Apparatus as claimed in any of claims 12 to 14, in which the world generating means comprises means for permuting or taking a selection of permutations of set-actions.

16.   Apparatus as claimed in any of claims 12 to 15, in which the world generating means comprises means for permuting or taking a selection of permutations of set-meta-events.

17.   Apparatus as claimed in any of claims 12 to 16, comprising means for responding to a request from an external program for information on the state model with the requested information.

18.   Apparatus as claimed in any of claims 12 to 17, comprising means responsive to an event-processing instruction for processing an event.